

MARCO LA BARBERA

ELECTRONICS ENGINEER

I am currently enrolled as a first-year student in the master's degree program in Electronics Engineering at Politecnico di Milano. I have always been fascinated by understanding the world behind Electronics and Robotics. My current academic interests have a particular emphasis on the study of Digital Electronic Systems, specifically regarding FPGAs and ASICs. This enthusiasm has also driven me to undertake various personal projects, such as developing a 6502 IC-based computer and building a mechanical humanoid arm.

🇮🇹 Italian

📅 10/05/2001

📍 Bergamo, Italy

📞 +39 327 022 7002

✉️ marcolbr2001@gmail.com

🌐 Marco La Barbera

👤 Marcolbr2001

KEY SKILLS

- Digital Electronic Systems
- FPGAs/ASICs Design
- Microcontrollers architecture
- RISC-V and MIPS architecture
- Vivado/Vitis
- VHDL, Verilog, HLS
- C/C++, Python, MATLAB, Assembly
- Cadence OrCAD pspice and PCB, KiCad

LANGUAGES

Italian - Native Speaker

English - Proficient

CERTIFICATES

IELTS ACADEMIC

British Council (01/04/2023)

Overall Band Score: 6.5

ECDL

AICA (23/05/2019)

ECDL standard certificate

EDUCATION

07/2025

09/2023

Politecnico di Milano - Milan, Italy

MSc in Electronics Engineering

Course Highlights:

- Electronic Systems
- Analog Circuit Design
- Digital Integrated Circuit Design
- Advanced Computer Architecture

NecstLab Member: VHDL, Verilog and HLS - based FPGA Projects

07/2023

09/2020

Politecnico di Milano - Milan, Italy

Bachelor's Degree in Electronics Engineering

Final grade: 102/110

Course Highlights:

- Digital Electronic Systems
- Analog Electronics
- Computer Architecture
- Solid State Electronics
- Electromagnetic Fields and Optics

06/2020

09/2015

Liceo Scientifico L. Mascheroni - Bergamo, Italy

Secondary-school diploma at Liceo

Scientifico, option of applied Science

Final grade: 94/100

KEY PROJECTS

06/2024

02/2024

NecstLab - Milan, Italy

AXI4 High Speed Communication for General Purpose Microprocessors and RegEx Architectures

HLS synthesis of an AXI4 interface, followed by a VHDL level insertion with a double-cache buffering and a operation scheduler ALU

10/2020

05/2019

Bergamo Science Center - Bergamo, Italy

INAF Cosmic Ray detector Enhancement through microcontroller insertion

A collaborative project with BSC and INAF developed a cosmic ray prototype detector using a pair of Geiger tubes integrated with a microcontroller for data extrapolation, analysis, and particle type discrimination.